

IN THE CLAIMS

1. (Currently Amended) A neighbor cell notifying apparatus for notifying a mobile station of predetermined information in a mobile communication network for implementing radio communication utilizing a plurality of cells between the mobile station and a base station, the neighbor cell notifying apparatus comprising:

cell information extracting means for extracting neighbor cell information items for specifying identifying respective neighbor cells corresponding to of each of said plurality of cells, including a first cell and a second cell utilized by the mobile station for communication with the base station;

cell rank determining means for, based on the extracted neighbor cell information items extracted, determining ranks of ranking the neighbor cell information items that the mobile station is to be notified of, wherein the cell rank determining means in favors of neighbor cell information items about neighbor cells common to the a first cell and a the second cell out of the plurality of cells; and

cell information notifying means for notifying the mobile station of a predetermined number of neighbor cell information items among said neighbor cell information items based on the basis of the determined ranking ranks determined.

2. (Currently Amended) A neighbor cell notifying apparatus for notifying a mobile station of predetermined information in a mobile communication network for implementing radio communication utilizing a plurality of cells between the mobile station and a base station, the neighbor cell notifying apparatus comprising:

cell information extracting means for extracting neighbor cell information items identifying for specifying respective neighbor cells corresponding to of each of said plurality of cells;

cell rank determining means for determining ranks of ranking the neighbor cell information items that the mobile station is to be notified of, based on the extracted neighbor cell information items extracted and on predetermined priority information items preliminarily determined for the respective neighbor cells; and

cell information notifying means for notifying the mobile station of a predetermined number of neighbor cell information items among said neighbor cell information items based on the basis of the determined ranking ranks determined.

3. (Currently Amended) The neighbor cell notifying apparatus according to Claim 2, wherein the cell rank determining means is configured to:

delete a neighbor cell information items about of one of the neighbor cells common to a first cell and a second cell out of the plurality of cells, based on the neighbor cell information items extracted by the cell information extracting means; and

determine the ranks of rank the neighbor cell information items that the mobile station is to be notified of, based on the neighbor cell information items after the deletion, and on the predetermined priority information items preliminarily determined for the respective neighbor cells.

4. (Currently Amended) The neighbor cell notifying apparatus according to Claim 2 or 3, wherein the predetermined priority information items are is determined based on handover rates of the respective neighbor cells.

5. (Currently Amended) The neighbor cell notifying apparatus according to Claim 2 or 3, wherein the predetermined priority information items are is determined based on numbers of mounted utilized channels in the respective neighbor cells.

6. (Currently Amended) A neighbor cell notifying method of notifying a mobile station of predetermined information in a mobile communication network for implementing radio communication utilizing a plurality of cells between the mobile station and a base station, the neighbor cell notifying method comprising:

~~an extracting step wherein cell information extracting means extracts~~ neighbor cell information items ~~for specifying identifying~~ respective neighbor cells ~~corresponding to of~~ each of said plurality of cells, including a first cell and a second cell utilized by the mobile station for communication with the base station;

ranking a determining step wherein, based on the extracted neighbor cell information items ~~extracted, cell rank determining means determines ranks of~~ the neighbor cell information items that the mobile station is to be notified of, ~~in by favor favoring~~ of neighbor cell information items ~~about neighbor cells that are common to a the~~ first cell and ~~a the~~ second cell out of the plurality of cells; and

~~a notifying step wherein cell information notifying means notifies~~ the mobile station of a predetermined number of neighbor cell information items among said neighbor cell information items ~~based on the basis of the determined ranking ranks determined.~~

7. (Currently Amended) A neighbor cell notifying method of notifying a mobile station of predetermined information in a mobile communication network for implementing radio communication utilizing a plurality of cells between the mobile station and a base station, the neighbor cell notifying method comprising:

~~an extracting step wherein cell information extracting means extracts~~ neighbor cell information items ~~for specifying identifying~~ respective neighbor cells ~~corresponding to of~~ each of said plurality of cells;

~~a determining step wherein cell rank determining means determines ranks of ranking the neighbor cell information items that the mobile station is to be notified of, based on the extracted neighbor cell information items extracted and on predetermined priority information items preliminarily determined for the respective neighbor cells; and~~

~~a notifying step wherein cell information notifying means notifies the mobile station of a predetermined number of neighbor cell information items among said neighbor cell information items based on the basis of the determined ranking ranks determined.~~